

# Use Cases

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## Design a nanoparticle to target a specific disease

Use Case	Design a nanoparticle to target a specific disease
Description	Find a platform that is bioavailable and find moieties that can be used to be targeted to the cells/tissue of interest
Scope	Pharmacokinetics for nanoparticles, disease surface markers, immunochemistry, ligand kinetics

## Smart drug design to better target a small molecule and reduce drug toxicity

Use Case	Smart drug design to better target a small molecule and reduce drug toxicity
Description	Find a bioavailable platform, find toxicity studies for the small molecule of interest
Scope	Nanoparticle(s); small molecule toxicity studies, biological pathway(s); delivery method(s); interaction domain(s); adverse event(s)

## Situational awareness - trend analysis of nanoparticle use or description across different domains

Use Case	Situational awareness - trend analysis of nanoparticle use or description across different domains
Description	Connect the USPTO and connect to nanoscale objects/materials using the InterNano taxonomy and meta-ontology distribution analysis of patents and grants.
Scope	nanomanufacturing and all stakeholders

## Identify nanomanufacturing processes that are part of existing patents

Use Case	Identify nanomanufacturing processes that are part of existing patents
Description	Connect the USPTO with the InterNano taxonomy to help standardize processes in the USPTO database, identify patents that use the applicable process.
Scope	nanomanufacturing and all stakeholders

## Identify nanoscale objects and nanostructured materials that are part of existing patents

Use Case	Identify nanoscale objects and nanostructured materials that are part of existing patents
Description	Connect the USPTO with the InterNano taxonomy to help standardize nanoscale objects and materials, identify patents that use the applicable material.
Scope	nanomanufacturing and all stakeholders

